

# Notice of Allowability

Application No.

10/665,719

Examiner

Dah-Wei D. Yuan

Applicant(s)

KINKELAAR ET AL.

Art Unit

1745

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/26/07.
2. ☒ The allowed claim(s) is/are 1-14, 16-185, 202-215 and 217.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date <u>04262007</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                   | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

**ORIENTATION INDEPENDENT LIQUID FUEL RESERVOIR**

Examiner: Yuan

S.N. 10/665,719

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July 10, 2007

**Detailed Action**

1. The Applicant's amendment filed on April 26, 2007 was received. Claim 15 was cancelled. Claims 1,193,202,206,212 were amended.
2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on December 28, 2006.

***Examiner's Amendment***

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
4. This application is in condition for allowance except for the presence of claims 186-201,216 non-elected without traverse. Accordingly, claims 186-201,216 are cancelled.

***Claim Rejections***

5. The claim rejections under 35 U.S.C. 103(a) as obvious over Hockaday, Olsen et al. and Bryant et al. on claims 1-7,15-19,29-41,45-47,53-56,59-66,70-75,79-89,93-119,121-125,130,132-138,140-144,146,148-152,154-158,160-164,166,168-172,174-185 are withdrawn

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because the independent claim 1 has been amended. The claim rejections under 35 U.S.C. 103(a) as obvious over Hockaday, Olsen et al. and Bryant et al. as applied to claims 1-7,15-19,29-41,45-47,53-56,59-66,70-75,79-89,93-119,121-125,130,132-138,140-144,146,148-152,154-158,160-164,166,168-172,174-185 above, and further in view of Childs et al. on claims 8-14,20-28,48-52,57,58,76-78,120,131,139,147,159, 167 have been withdrawn because the independent claim 1 has been amended. The claim rejections under 35 U.S.C. 103(a) as obvious over Hockaday, Olsen et al. and Bryant et al. as applied to claims 1-7,15-19,29-41,45-47,53-56,59-66,70-75,79-89,93-119,121-125,130,132-138,140-144,146,148-152,154-158,160-164,166,168-172,174-185 above, and further in view of Sharples on claims 42,67,90,137,145,153,165,173 have been withdrawn because the independent claim 1 has been amended. The claim rejections under 35 U.S.C. 103(a) as obvious over Hockaday, Olsen et al. and Bryant et al. as applied to claims 43,44,68,69,91,92 have been withdrawn because the independent claim 1 has been amended. The claim rejections under 35 U.S.C. 103(a) as obvious over Hockaday, Olsen et al. and Bryant et al. as applied to claims 1-7,15-19,29-41,45-47,53-56,59-66,70-75,79-89,93-119,121-125,130,132-138,140-144,146,148-152,154-158,160-164,166,168-172,174-185 above, and further in view of Higuchi on claims 126-129 have been withdrawn because the independent claim 1 has been amended.

#### *Reasons for Allowance*

6. Claims 1-14,16-185,202-215,217 are allowed. The invention of independent claim 1 recites a liquid fuel reservoir for a liquid fuel cell comprising a container, a first port, a

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pressurized pallet or bladder comprising a compressible porous material, and a wicking structure within the container volume and into which the liquid fuel can wick by capillary action and from which the liquid fuel may be discharged, the wicking structure (a) having a solid wicking structure which is no more than 50% of the container volume; (b) being in fluid communication with the first port, and extending from proximate the at least one extremity to proximate the inner end of the first port in order to be able to place the at least one extremity in fluid communication with the first port, in any orientation of the container, and at substantially any stage of liquid fuel depletion, to permit liquid fuel located proximate the at least one extremity to be wicked to the first port. The closest prior arts of record, Hockaday, Olsen et al. and Bryant et al., do not teach the liquid fuel reservoir comprising a first port, a pressurized pallet or bladder comprising a compressible porous material and a wicking structure having a solid wicking structure volume which is no more than 50% of the container volume and permit liquid fuel located proximate the at least one extremity to be wicked to the first port in any orientation of the container and at substantially any state of liquid fuel depletion as recited in the claim. The invention of independent claim 202 recites a liquid fuel reservoir for a liquid fuel cell comprising a container, a first port, a pressurized pallet or bladder which is connected to a second port that allow a fluid to be introduced into the pressurized pallet or bladder, and a wicking structure within the container volume and into which the liquid fuel can wick by capillary action and from which the liquid fuel may be discharged, the wicking structure (a) having a solid wicking structure which is no more than 50% of the container volume; (b) being in fluid communication with the first port, and extending from proximate the at least one extremity to proximate the inner end of

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the first port in order to be able to place the at least one extremity in fluid communication with the first port, in any orientation of the container, and at substantially any stage of liquid fuel depletion, to permit liquid fuel located proximate the at least one extremity to be wicked to the first port. The closest prior arts of record, Hockaday, Olsen et al. and Bryant et al., do not teach the liquid fuel reservoir comprising a first port, a pressurized pallet or bladder which is connected to a second port that allow a fluid to be introduced into the pressurized pallet or bladder and a wicking structure having a solid wicking structure volume which is no more than 50% of the container volume and permit liquid fuel located proximate the at least one extremity to be wicked to the first port in any orientation of the container and at substantially any state of liquid fuel depletion as recited in the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dah-Wei D. Yuan  
July 10, 2007

A handwritten signature in black ink, appearing to read 'Dah Wei Yuan', with a long horizontal flourish extending to the right.